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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/767,078	01/30/2004	Masayuki Nakamura	501.33808CV4	6119
20457	7590	07/14/2004	EXAMINER	
ANTONELLI, TERRY, STOUT & KRAUS, LLP 1300 NORTH SEVENTEENTH STREET SUITE 1800 ARLINGTON, VA 22209-9889			NGUYEN, TAN	
			ART UNIT	PAPER NUMBER
			2818	

DATE MAILED: 07/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/767,078	Applicant(s) NAKAMURA ET AL.	
	Examiner Tan T. Nguyen	Art Unit 2818	<i>AW</i>

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-17 and 21-24 is/are allowed.
- 6) ☒ Claim(s) 18-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>01/30/04</u> . | 6) <input type="checkbox"/> Other: _____ |

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1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.
2. The Information Disclosure Statement submitted by Applicants on January 30, 2004 has been received and fully considered.
3. Claims 18-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Gans et al. (U.S. Patent No. 5, 905,682)

Gans et al. disclosed in figure 4 a substrate biasing circuit [60] which includes a voltage generator [62], such as a charge pump, that has a control terminal [64] and output terminal [66] (column 4, lines 49-53). The voltage generating circuit [62] generates an output voltage, preferably a negative voltage at the output terminal [66] in normal operation (column 4, lines 57-59; column 6, lines 43-45). The substrate biasing circuit [60] has an externally accessible input terminal [72] coupled to the voltage generating circuit [62] via a control terminal [64] (column 5, lines 6-12). Gans et al. disclosed that in normal operation, the output voltage at the output terminal [66] oscillates around a predetermined voltage (column 5, lines 33-35), while during a test mode, when a voltage of +4 volts is applied to the externally accessible input terminal [72], the voltage generating circuit [62] will generate a -2 volts output signal at the output terminal [66] (column 5, lines 51-53), and when the voltage applied to the externally accessible terminal [72] is +5 volts, the voltage generating circuit [62] will generate a -3 volts (column 5, lines 55-57).

Regarding claim 19, Gans et al. disclose the substrate biasing circuit being used in a test mode (column 5, lines 38-68), which would inherently be a burn-in test mode.

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Regarding claim 20, Gans et al. discloses that the output terminal [66] of the voltage generating circuit [62] is coupled to the substrate of an integrated circuit on which the voltage generating circuit [62] is fabricated (column 5, lines 6-8). The substrate of the integrated circuit would inherently include a p-type well region or an n-well type region.

4. The following is an examiner's statement of reasons for allowance:

The prior art failed to show or suggest the internal voltage having first and second rates change in response to the change of an external voltage which also has first and second rate changes.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Pantelakis et al. is cited to show an integrated circuit device having a low voltage internal circuit and a high voltage internal circuit.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tan T. Nguyen whose telephone number is (571) 272-1789. The examiner can normally be reached on Monday to Friday from 07:00 AM to 03:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David C. Nelms, can be reached at (571) 272-1787. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Tan T. Nguyen
Primary Examiner
Art Unit 2818
July 06, 2004